Tuna Newsletter

National Marine Fisheries Service

- **Southwest Region**
- **Southwest Fisheries Science Center**

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U.S. TUNA STATISTICS

Editor's note: The following articles were prepared by NMFS personnel from data and information gathered from sources in the U.S. tuna industry and government. Further statistics are available on the Southwest Region's Web site, http://swr.ucsd.edu/

U.S. CANNED TUNA INDUSTRY HIGHLIGHTS, FIRST QUARTER 1998

Total receipts of tuna by U.S. canners during the first quarter of 1998 (January-March) increased by 12% to the equivalent of 101,100 short tons (st) of whole fish (round weight), compared to the first quarter of 1997 (Table 1). The principal species received was yellowfin tuna with 37% of the total, followed closely by skipjack and albacore with 35% and 28% of the total, respectively. Yellowfin tuna and albacore receipts increased by 84% and 35%, respectively, while skipjack receipts decreased by 28%.

Although the vast majority of tuna received by U.S. canners is whole fish, some quantity is received as loins or gilled-and-gutted. Receipts of tuna loins for the first quarter of 1998 were up by 19%. (Loins and gilled-and-gutted receipts are converted to round weight receipts by factors of 2.25 and 1.11, respectively. For this article, unconverted receipts are used unless otherwise stated.)

Domestic deliveries to U.S. canners for the first quarter of 1998 decreased by 19% while imports increased by 38% (Table 2). Yellowfin tuna was the largest component of all domestic deliveries at 15,100 st. Imports outpaced domestic deliveries by 30,600 st.

Albacore was the leading import for the first quarter of 1998 at 24,200 st, followed by yellowfin and skipjack tuna at 19,200 st and 17,700 st, respectively (Table 3). The leading supplier was Taiwan, with 42% of the import market, followed by South Korea with 21%.

The western Pacific Ocean was the source of 72% of the tuna received by U.S. canners during the first quarter of 1998 (Table 4). The next greatest sources

Table 1. Total U.S. cannery receipts (st) by species for the first quarters of 1997 and 1998. Totals may not add due to rounding.

Jan-Mar	Type	Albacore	Skipjack	Yellowfin[1]	TOTAL
1997	ROUND	21,000	41,100	13,000	75,200
	GILLED & GUTTED	*	0	400	400
	LOIN	100	3,200	3,100	6,400
	TOTAL (as received)	21,100	44,400	16,500	81,900
	TOTAL (round weight)[2]	21,200	48,400	20,400	89,900
1998	ROUND	26,800	25,500	31,500	83,800
	GILLED & GUTTED	0	0	200	200
	LOIN	800	4,200	2,500	7,600
	TOTAL (as received)	27,700	29,600	34,300	91,600
	TOTAL (round weight)[2]	28,700	34,900	37,500	101,100

*Less than 100 st reported for this category.

[1]May include a small amount of bigeye tuna.

[2]Converted to round weight by using factors of 1.11 for gilled-and-gutted and 2.25 for loins.

Table 2. U.S. cannery receipts (st) of domestic and imported tuna by species for the first quarters of 1997, 1998 and the recent (1993-97) first quarter averages. Totals may not add due to rounding.

Jan-Mar	Source	Albacore	Skipjack	Yellowfin[1]	TOTAL
		TOTAL CANNERY RECEIPTS (ALL LOCATIONS)			
1997	DOMESTIC	900	28,100	8,600	37,500
	IMPORTED	20,200	16,300	7,900	44,400
	TOTAL	21,100	44,400	16,500	81,900
1998	DOMESTIC	3,500	12,000	15,100	30,500
	IMPORTED	24,200	17,700	19,200	61,100
	TOTAL	27,700	29,600	34,300	91,600
1993-97 Average	DOMESTIC	1,200	34,100	9,800	45,200
	IMPORTED	22,300	17,000	10,100	49,400
	TOTAL	23,600	51,100	20,000	94,600

[1]May include a small amount of bigeye tuna.

Table 3. U.S. cannery imports (st) of tuna by species and source (flag of catcher vessel) for the first quarter of 1998. Totals for the first quarter of 1997 are given for comparison. Note that the flag of the catcher vessel does not necessarily reflect the country of export or point of shipment. Totals may not add due to rounding.

VESSEL FLAG	January-March 1998				1997
	Albacore	Skipjack	Yellowfin[1]	TOTAL	TOTAL
BELIZE	700	100	*	800	500
BRAZIL	500	0	*	500	0
CANADA	200	0	0	200	0
ECUADOR	*	1,300	600	1,900	3,400
FSM	0	100	*	100	400
FIJI	1,000	0	*	1,000	100
FRANCE	300	900	600	1,800	3,900
GHANA	0	400	1,100	1,500	2,100
HONDURAS	1,900	*	0	1,900	2,600
ITALY	0	400	200	500	0
JAPAN	1,700	0	0	1,700	2,600
NEW ZEALAND	600	600	0	1,200	1,800
PANAMA	500	100	*	600	800
PHILIPPINES	0	1,200	500	1,700	800
SEYCHELLES	0	1,200	600	1,800	0
SOUTH AFRICA	100	0	0	100	1,400
SOUTH KOREA	900	4,100	7,600	12,600	6,400
SPAIN	100	0	*	100	100
TAIWAN	15,100	5,000	5,700	25,700	12,600
THAILAND	0	500	200	700	0
USA	0	200	200	400	100
VANUATU	0	300	900	1,200	3,400
WESTERN SAMOA	700	0	*	700	500
UNKNOWN	0	1,200	900	2,100	0
OTHER	100	*	*	100	900
TOTAL	24,200	17,700	19,200	61,100	44,400

*Less than 100 st reported for this category.
[1]May include a small amount of bigeye tuna.

were the eastern Pacific and Indian oceans, accounting for 13% and 8% of the tuna received by U.S. canners, respectively.

U.S. TUNA FISHERIES UPDATE

EASTERN PACIFIC TROPICAL TUNA FISHERY

During the period January through September 1998, the U.S. tropical tuna fleet in the eastern Pacific caught an estimated 5,600 metric tons (mt) of yellowfin tuna, 6,000 mt of skipjack tuna and 2,700 mt of bigeye tuna (Figure 1). The yellowfin tuna catch was down by 31%, the skipjack tuna catch was down 28%, and the bigeye tuna catch was down 18% compared to the same period in 1997.

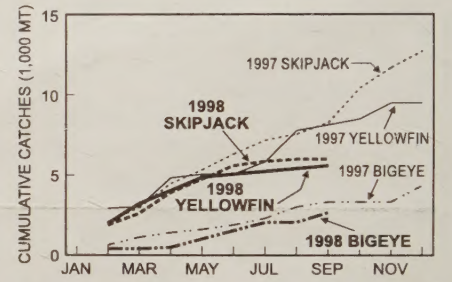

Figure 1. Cumulative catches, by month, for the U.S. eastern tropical Pacific tuna fleet, 1997 and 1998. (Note that data are not available for January.)

During this period the surface fleets (purse seiners and baitboats) of all nations fishing in the eastern tropical Pacific Ocean caught an estimated 201,000 mt of yellowfin tuna, 87,000 mt of skipjack tuna and 22,100 mt of bigeye tuna. The leading nation was Mexico with 32% of the total catch, followed by Ecuador with 24% and Venezuela with 17%. The U.S. fleet accounted for 5% of the tuna catch.

WESTERN PACIFIC TROPICAL TUNA FISHERY

For the period January through September 1998, U.S. tuna purse seiners fishing in the western tropical Pacific landed an estimated 90,200 mt of skipjack tuna and a combined 46,000 mt of

Table 4. Receipts (st) of tuna by U.S. canneries by species and area of capture for the first quarters of 1997 and 1998. Totals may not add due to rounding.

SOURCE	Albacore		Skipjack		Yellowfin[1]	
	1997	1998	1997	1998	1997	1998
E. ATLANTIC OCEAN						
DOMESTIC	0	0	0	0	0	0
IMPORTED	3,600	2,100	1,500	400	900	1,100
TOTAL	3,600	2,100	1,500	400	900	1,100
W. ATLANTIC OCEAN						
DOMESTIC	0	*	0	0	0	*
IMPORTED	800	2,700	0	0	*	*
TOTAL	800	2,700	0	0	*	*
E. PACIFIC OCEAN						
DOMESTIC	0	3,400	2,900	2,300	1,900	1,500
IMPORTED	100	200	1,900	2,800	3,100	1,800
TOTAL	100	3,600	4,900	5,100	5,000	3,300
W. PACIFIC OCEAN						
DOMESTIC	900	*	25,100	9,600	6,700	13,600
IMPORTED	14,600	16,100	10,500	11,800	2,400	15,000
TOTAL	15,500	16,100	35,700	21,500	9,100	28,500
INDIAN OCEAN						
DOMESTIC	0	0	0	0	0	0
IMPORTED	1,100	3,200	2,300	2,600	1,600	1,300
TOTAL	1,100	3,200	2,300	2,600	1,600	1,300

*Less than 100 st reported for this category.
[1]May include a small amount of bigeye tuna.

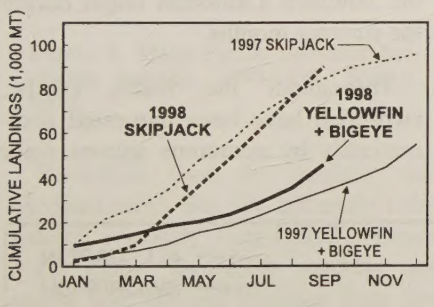

Figure 2. Cumulative tuna landings, by month, for the U.S. western tropical Pacific purse seine fishery, 1997 and 1998.

yellowfin and bigeye tuna (Figure 2). The skipjack tuna landings were up 7%, and the combined yellowfin and bigeye tuna landings were up 36% from the 1997 landings for the same period. Thirty-nine vessels landed tuna from 148 trips for this period of 1998 compared to 33 vessels and 123 trips in 1997. *(Report provided by Doug Prescott, NMFS Southwest Fisheries Science Center, La Jolla, CA)*

NORTHERN PACIFIC ALBACORE FISHERY

The 1998 U.S. North Pacific albacore troll season began in May 1998 north of Midway Island and ended in September. The premature end of the season, which usually continues to early October, was due to marketing problems. The canneries in American Samoa which normally purchase most of the albacore caught by U.S. trollers were fully-supplied with albacore from Japanese, Taiwanese and Korean vessels. Many U.S. boats with full loads were unable to sell their fish and were forced to store their catch, waiting for the market to improve.

Based on preliminary logbook data, total landings for the 1998 season are expected to be approximately 8,000 mt, compared to 11,550 mt in 1997. Average daily catch rate of troll vessels appears to be better than the 46 fish per day rate in 1997. The decrease in landings appears to be due to marketing problems, not the availability of fish. The number of U.S. vessels in the North Pacific fleet remained high (approximately 1,000 vessels) with most vessels distributed along the U.S. West Coast. *(Report provided by John Childers, NMFS Southwest Fisheries Science Center, La Jolla, CA)*

SOUTHERN PACIFIC ALBACORE FISHERY

The 1997-98 U.S. South Pacific albacore troll fishery began in December 1997 and ended in March 1998. The U.S. fleet of 25 to 30 vessels caught an estimated 1,970 mt of albacore, compared to 1,400 metric tons landed by 28 U.S. vessels in the 1996-97 fishery. Catches in recent years have been far below the fishery's ten-year average annual catch of 2,400 mt. The fishing grounds extend from approximately 140°W to 160°W between 35°S and 40°S. Nearly all U.S. vessels sold their catch to a cannery in Fiji leased by Bumble Bee Seafoods. The canneries in American Samoa which normally purchase most of the albacore caught by U.S. trollers were fully-supplied with albacore from Japanese, Taiwanese, and Korean vessels.

Two fishing vessels chartered by the American Fisherman's Research Foundation collected oceanographic data from the eastern Pacific areas off South America. Logbooks and length-frequency data for this fishery are collected by the NMFS/SWR field office in Pago Pago, American Samoa. *(Report provided by John Childers, NMFS Southwest Fisheries Science Center, La Jolla, CA)*

WESTERN ATLANTIC BLUEFIN TUNA FISHERY

Landings, through September 15, for the 1998 U.S. commercial western Atlantic bluefin tuna fishery are given in Table 5. For related news, please see the ***Recent Developments*** section for

Table 5. U.S. commercial landings of Atlantic bluefin tuna for 1998 through September 15.

Category	Number of Fish	Avg. Wt.[1]	Gross Wt.[2]	Adjusted Quota[2]
General	**2,895**	442.6	**581.17**	**707**
Handline	133	442.1	26.67	
Rod & Reel	2369	448.2	481.62	
Harpoon	393	408.8	72.88	
Harpoon	**351**	**376.3**	**59.92**	**60**
Incidental	**185**	**453.1**	**38.02**	**74**
Longline	180	**452.7**	36.96	73
North	88	**389.9**	15.56	24
South	92	**512.8**	21.40	49
Other	5	**467.4**	1.06	1
Purse Seine	**552**	**400.2**	**100.21**	**250**
Giant	529	**406.3**	97.49	
Large Medium	23	**260.1**	2.71	
Angling[3]	**16**	**324.4**	**2.35**	**8**
North	0	-	0.00	3
South	16	**324.4**	2.35	5
Reserve	0	-	**0.00**	**15**
Total	**3,999**	**430.9**	**781.67**	**1,114**

[1]Based on individual weights in pounds.

[2]Metric tons.

[3]Large Medium and Giant Size Class (Trophy); does not include School, Large School or Small Medium Size Class tuna harvested in the Angling Category.

details of the Draft Fishery Management Plan for Atlantic HMS. *(Report provided by Pat Scida, NMFS Northeast Region, Gloucester, MA)*

REPORTS

Editor's note: Original reports are published as a service to subscribers and may not represent the views of the NMFS. Readers should contact the authors of reports for details, if needed.

SWORDFISH MOVEMENTS AND FISHERY TRENDS IN THE NORTH PACIFIC

David Holts, Southwest Fisheries Science Center, National Marine Fisheries Service, NOAA, La Jolla, California 92038-0271, USA

Broadbill swordfish, *Xiphias gladius*, in the central and eastern North Pacific move long distances and may have established migratory patterns. Swordfish tagged and released north of Hawaii by U.S. longliners are being recaptured in the eastern North Pacific by vessels fishing in coastal and international waters. Data gathered by the Southwest Fishery Science Center's Billfish Tagging Program (*1998 Billfish Newsletter*) indicate 492 swordfish have been tagged and released in the Pacific. There have been 14 swordfish recaptured (2.8%).

Three of the swordfish tagged north of Hawaii by longline vessels moved northeast toward the coast of North America. One was recaptured near San Clemente Island, California, by a commercial drift net vessel fishing swordfish and pelagic sharks. This fish traveled 1,852 nm and grew 114 cm in length during its 610 days at liberty. The second swordfish was recaptured 900 nm to the east by a Japanese longline vessel fishing in international waters. This fish grew 57 cm in 287 days at liberty. The third swordfish, also recaptured by a longline vessel, had a net movement of only 321 nm in 364 days and increased in weight by 25 kg. Other tag returns indicate swordfish spend considerable time in the North Pacific transition zone north of Hawaii.

The SWFSC, along with cooperating recreational anglers and commercial fishers, tagged 17 swordfish in the summer of 1978 in the Southern California Bight in an effort to identify movement patterns. Six (35%) were recaptured within 35 days and none had moved farther than 30 nautical miles (nm). This suggests that many swordfish remain in the Southern California Bight during the summer months.

Throughout the North Pacific, swordfish have been harvested commercially by numerous nations since

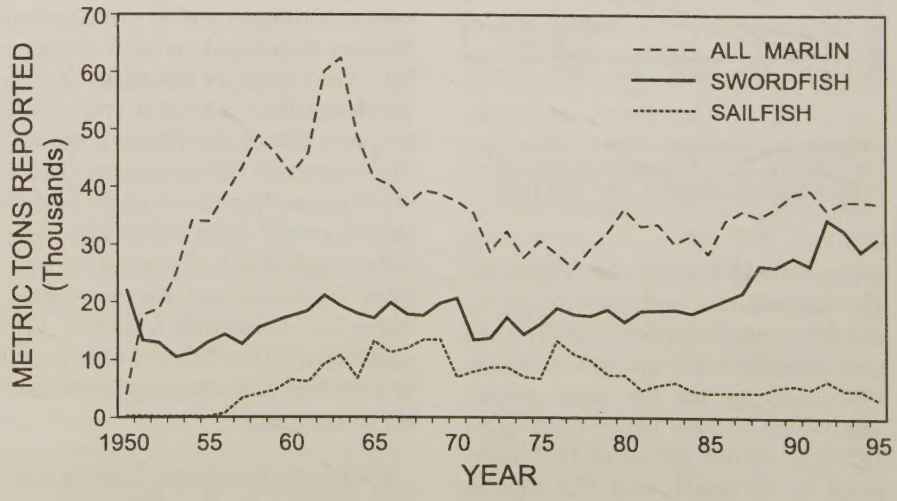

Figure 3. Pacific billfish landings, 1950-1995. Source: FAO.

the early 1950s. Japan was the first and most effective at targeting swordfish. Along the U.S. Pacific Coast, California-based harpoon vessels comprised the primary fishery for swordfish until 1980 when that fishery was largely displaced by the drift net fishery for swordfish and pelagic sharks. Landings from the drift net fleet exceeded 1,500 mt by 1984 while landings from the harpoon fishery dropped to less than 100 mt during the same period. The Hawaiian longline fishery for swordfish was small until 1990 when it expanded due to an influx of vessels from the eastern U.S. and Gulf states. Landings in Hawaii increased from 40 mt in 1990 to over 5,000 mt in 1993.

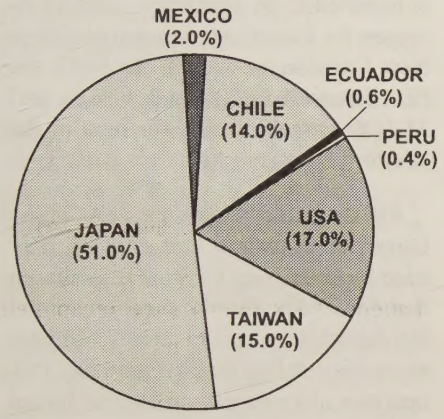

Figure 4. Major Pacific swordfish harvesting nations, 1990-1995. Source: FAO.

Swordfish from the Atlantic and Mediterranean Sea are currently considered seriously over-fished. However, global swordfish markets are strong and reduced supplies from the Atlantic have resulted in increased demand for Pacific swordfish. In the Pacific, swordfish stocks are considered healthy and stable, and catches continue to increase (Figure 3). Japan, Taiwan, United States and Chile are currently the largest producers of swordfish in the Pacific. There has been a rapid growth of swordfish production from Central and South American countries (Figure 4).

Currently there is neither an international management plan nor an international regulatory agency to manage swordfish stocks in the Pacific. International fishery data are being monitored by resource agencies. The Western Pacific Fishery Management Council has taken the lead in managing fisheries for swordfish and associated species by U.S. vessels based in the western Pacific portion of the U.S. EEZ. The Interim Scientific Committee (ISC) and the Standing Committee on Billfish and Tuna (SCBT) both monitor and investigate the status of Pacific swordfish.

RECENT DEVELOPMENTS IN TUNA FISHERIES

Editor's note: The following news items, compiled from fishery trade and industry journals, newspapers and NMFS reports, are provided only as a service to our readers. The NMFS does not guarantee their accuracy.

UNITED STATES

Draft Fishery Management Plan for Atlantic HMS: The draft Atlantic Highly Migratory Species (HMS) Fishery Management Plan (FMP) is now available for review. Comments on the document are requested for a 90-day period, until January 25, 1999. The FMP was developed in response to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requirement to develop a rebuilding plan for overfished stocks. In September 1997, Atlantic bluefin tuna, North Atlantic swordfish and large coastal sharks in the Atlantic were listed by NMFS as overfished; Atlantic bigeye tuna was listed as overfished in September 1998. To date, no FMP has been implemented for Atlantic tunas, and Atlantic tunas have been managed under the authority of the Atlantic Tunas Convention Act (ATCA). North Atlantic swordfish and Atlantic sharks have been managed under an FMP since 1985 and 1993, respectively, and are managed under the Magnuson-Stevens Act.

Upon implementation of the HMS FMP, NMFS will issue Atlantic tuna and North Atlantic swordfish regulations under the authority of both the Magnuson-Stevens Act and ATCA. Regulations issued under the authority of ATCA carry out the recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT).

If approved, the HMS FMP will integrate management for Atlantic tunas, swordfish and sharks, replacing the existing FMPs. The HMS FMP will define overfishing status determination criteria, which designate western Atlantic bluefin tuna, Atlantic bigeye tuna, North Atlantic swordfish and large coastal sharks of the Atlantic as overfished. NMFS has developed a domestic rebuilding strategy that identifies biomass and fishing mortality targets and proposes a suite of management alternatives designed to reduce fishing mortality, bycatch and bycatch mortality. Preferred alternatives include measures to rebuild overfished stocks in time frames consistent with guidelines for implementation of National Standard 1 of the Magnuson-Stevens Act, to control fishing effort and allocate domestic landing quotas, and to address issues of safety at sea, enforcement, permitting, reporting and catch monitoring. NMFS does not identify a preferred alternative for bluefin tuna stock rebuilding in the draft FMP because new information on stock status and/or recovery trajectories from the recent 1998 assessment, as well as negotiations at the 1998 ICCAT meeting, could result in development of new rebuilding alternatives for the bluefin tuna stock. The preferred alternative for bluefin tuna rebuilding will be identified following the November 1998 ICCAT meeting. NMFS will publish the preferred alternative and associated analyses as an addendum to the draft FMP, and will propose measures to implement the preferred alternative in a separate rulemaking.

If you wish to receive a copy of the draft HMS FMP, please contact Eric Barber or Sarah McLaughlin at (301) 713-2347. Written comments on the

draft HMS FMP should be sent to Rebecca Lent, Chief, Highly Migratory Species Management Division, NMFS, 1315 East-West Highway, Silver Spring, MD, 20910.

Bluefin Tuna Enforcement: In an early September 1998 investigation of major New England tuna landings, NMFS enforcement agents boarded and inspected more than 200 vessels, detecting 11 alleged violations. Violations included landing undersize fish, fishing during closed periods, failing to have proper tuna permits, taking more tuna than permitted and transferring tuna to other vessels. (AP)

ETP Dolphin Assessment Cruises: On July 31, 1998, the first of several NMFS dolphin research cruises to be conducted over the next three years departed from San Diego for the eastern tropical Pacific Ocean to determine the abundance of spotted and eastern spinner dolphins. These are the first assessments of these dolphin stocks in more than a decade, and data obtained will help determine whether intentional encirclement of dolphins with purse seines harms these animals. (AP)

Atlantic Swordfish: On August 28, 1998, NMFS announced that it would not reopen the Atlantic swordfish pelagic driftnet fishery due to the large incidental bycatch of sea turtles and marine mammals taken during a 14-day season in early August 1998. (NOAA press release)

Import Ban on Undersized Atlantic Swordfish: NMFS is proposing to ban the import of undersized Atlantic swordfish, extend dealer permitting and reporting requirements to all swordfish importers, and implement a Certificate of Eligibility program to aid in import tracking. These measures are necessary to implement a 1995 recommendation of the International Commission for the Conservation of Atlantic Tunas (ICCAT) with respect to controlling the harvest of undersized Atlantic swordfish and to facilitate the collection of information relating to the trade in Atlantic swordfish which may hinder conservation efforts by the United States and ICCAT.(NMFS press release)

UPCOMING TUNA MEETINGS

(Organizer; meeting type: sci=science, adm=administration)

- **NOV 9-14.** Seventh Expert Consultation on Indian Ocean Tunas. Victoria, Seychelles. (Indian Ocean Tuna Commission; sci)
- **NOV 16-24.** International Commission for the Conservation of Atlantic Tunas Annual Meeting. Santiago, Spain. (ICCAT; adm)
- **NOV 16-24.** ICCAT Commission Annual Meeting. Santiago, Spain. (ICCAT; adm)
- **DEC 7-12.** First Indian Ocean Tuna Commission meeting. Victoria, Seychelles. (IOTC; sci, adm)

1999

- **JAN 15-23.** Second Meeting of the Interim Scientific Committee for Tunas and Tuna-like Species in the North Pacific Ocean (ISC). Honolulu, HI. (NMFS; sci)
- **FEB 8-15.** Fourth Multilateral High-Level Conference (MHLC). Honolulu, HI. (FFA; adm)
- **MAY 24-27.** Fiftieth Annual International Tuna Conference. Lake Arrowhead, CA. (Inter-American Tropical Tuna Commission; sci)

WESTERN PACIFIC

Southern Bluefin Tuna: On August 31 and September 1, 1998, New Zealand and Australia initiated formal dispute resolution proceedings under the Convention for the Conservation of Southern Bluefin Tuna against Japan to halt experimental harvests of southern bluefin tuna in excess of agreed upon quotas. On September 16, Japan released results of its experimental fishing program (EFP) for southern bluefin tuna conducted between July 10 and August 31, 1998, with 65 vessels catching 1,363 mt of bluefin tuna. On September 22, the Australian Embassy in Tokyo released a statement calling the Japanese EFP fundamentally flawed in design, implementation and analysis, resulting in no indication that southern bluefin tuna stocks were recovering or that increased catch could be justified. (Dow Jones News)

European Tuna Harvests in the Pacific? On October 7, 1998, the Forum Fisheries Agency announced that the European Union has requested licenses to allow 20 large purse seine vessels, primarily Spanish, to fish for tuna in the Western Pacific, and that negotiations are underway in Brussels. France is reported to be separately seeking licenses for French vessels to operate in New Caledonian waters. In 1997, the FFA licensed 1,210 Asian vessels and 35 U.S. vessels to fish for tuna in the Western Pacific. (AP)

Fijian Tuna Cannery: A Fijian Government-owned tuna cannery may soon be taken over by San Diego-based Bumble Bee Seafoods. A report quoted the Agriculture and Fisheries Minister as saying that Pacific Fiji Company Ltd, operator of a cannery on Ovalau Island will enter into a five-year contract with Bumble Bee. At the present time, Bumble Bee supplies the Fijian plant with raw material. The cannery has a processing capacity of more than 16,500 mt a year and has preferential access to the EU under the Lome Agreement. Bumble Bee is the second largest producer of canned tuna in the U.S., with processing plants near Los Angeles, in Puerto Rico and in Ecuador. (INFOFISH *Trade News*, Aug. 17, 1998)

EUROPE

UK Canned Tuna Imports: Imports of canned tuna into the United Kingdom in 1997 totaled 11.34 million cases (48 6.5-oz cans), an increase of 14% over 9.97 million cases in 1996. The UK has now overtaken France as Europe's largest canned tuna market. Imports from the European Union were 1.67 million cases as compared to 1.51 million in 1996, with the main supplier

being Spain. Shipments from Thailand, the largest non-EU supplier, rose slightly to 2.52 million cases. Thailand was followed by Ghana which supplied 1.24 million cases, double the volume in 1996 and 13 times greater than the volume in 1994. The sharp increase in supplies was due to greater production by the Heinz-owned canned tuna plant in Tema, Ghana, and a preferential tariff for the African-Caribbean-Pacific (ACP) countries. Supplies from the Philippines (now in third place) dropped by 4% to 965,400 cases as compared to 1.01 million in 1996. From Latin America, Ecuador was the leading supplier with 596,700 cases (a big increase compared to 63,400 cases in 1996) followed by Colombia with 125,700 cases (64,700 cases in 1996). (INFOFISH *Trade News*, Sept. 2, 1998)

Spanish May Build Cannery in Brazil: The Spanish group Calvo Pesca plans to invest $40 million to set up a canned and smoked sausage processing factory in Bahia, Brazil, using tuna as the raw material. Calvo Pesca has projects in three other countries and is the second largest in Europe in the fishery sector. Whether the investment in Bahia goes ahead will depend on the results of a year-long tuna resources study that is planned to be completed by July 1999. (INFOFISH *Trade News*, Sept. 2, 1998)

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